


A world map showing tectonic plate boundaries. The map uses a color-coded system: yellow for divergent boundaries, blue for convergent boundaries, and red for transform boundaries. Red triangles are placed along these boundaries to indicate seismic activity. The map is centered on the Atlantic Ocean, showing the Americas, Europe, Africa, and parts of Asia and Australia.

Plate Tectonics

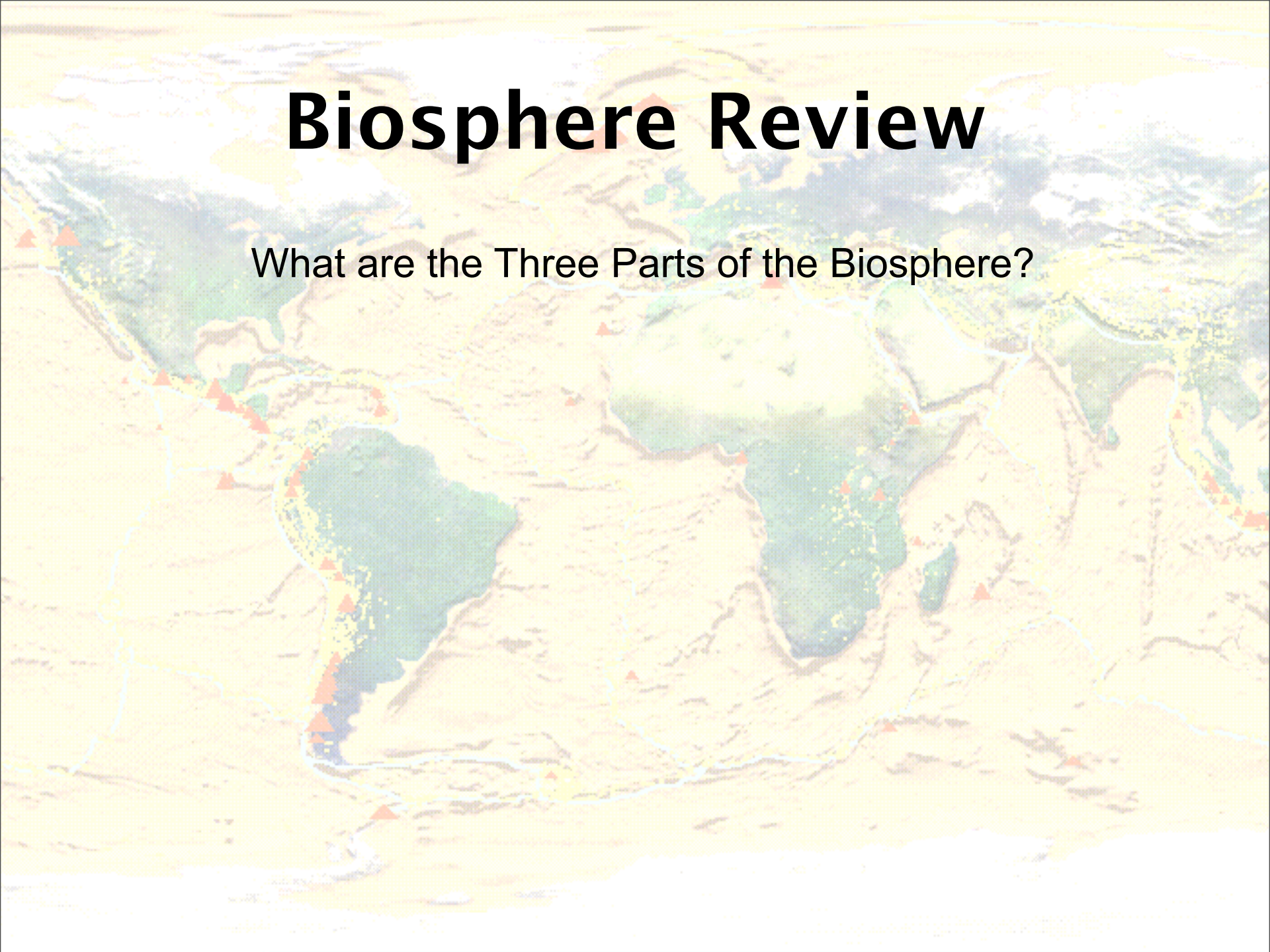
Ag Earth Science
Mr. Silva



Objective: Identify and describe the four pieces of evidence there are supporting the theory of continental drift.

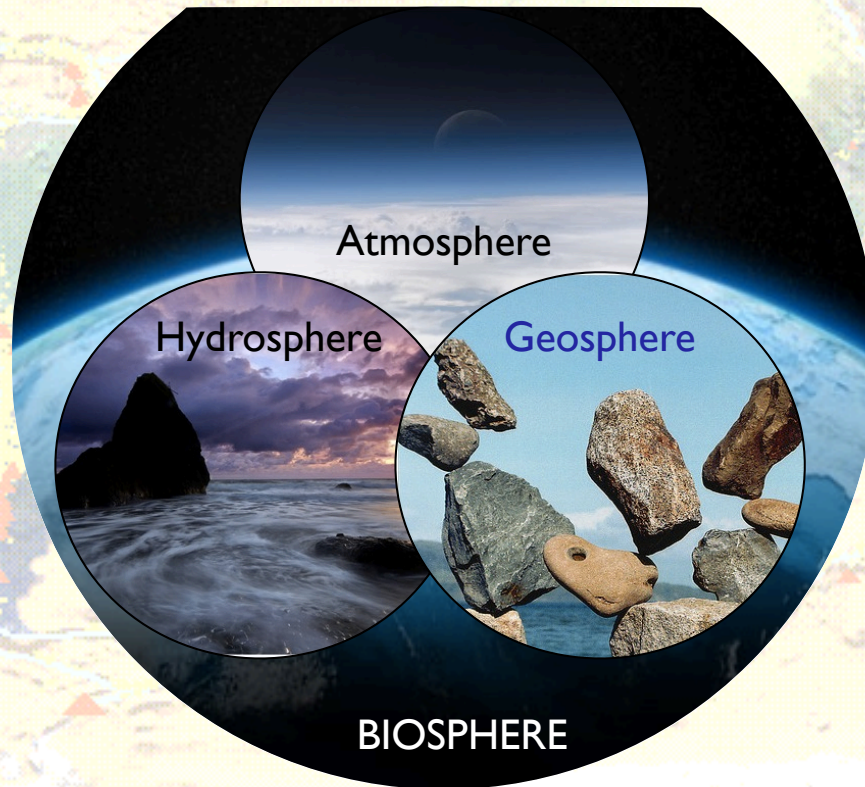
Biosphere Review

What are the Three Parts of the Biosphere?



Biosphere Review

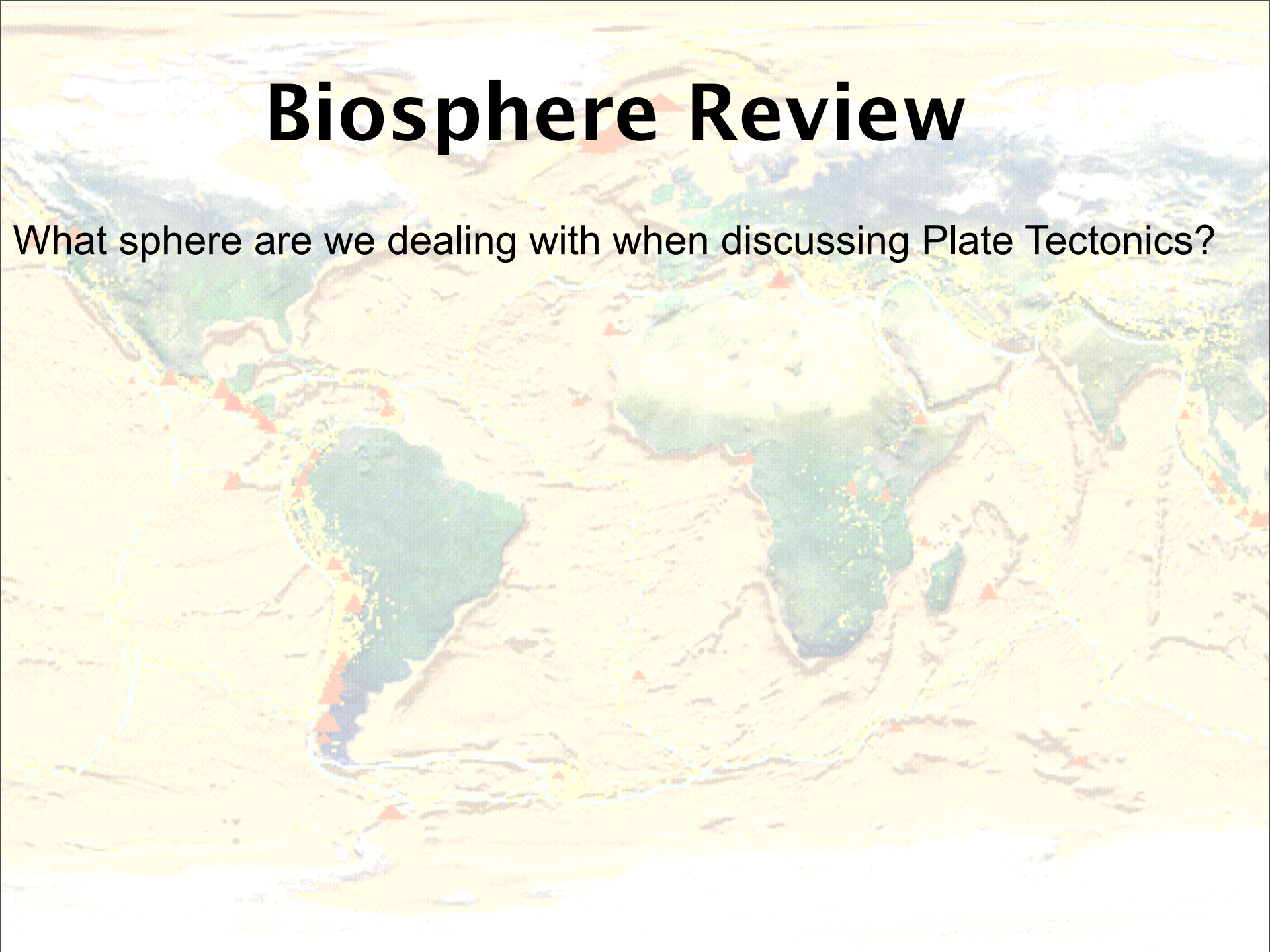
What are the Three Parts of the Biosphere?



Saturday, September 25, 2010

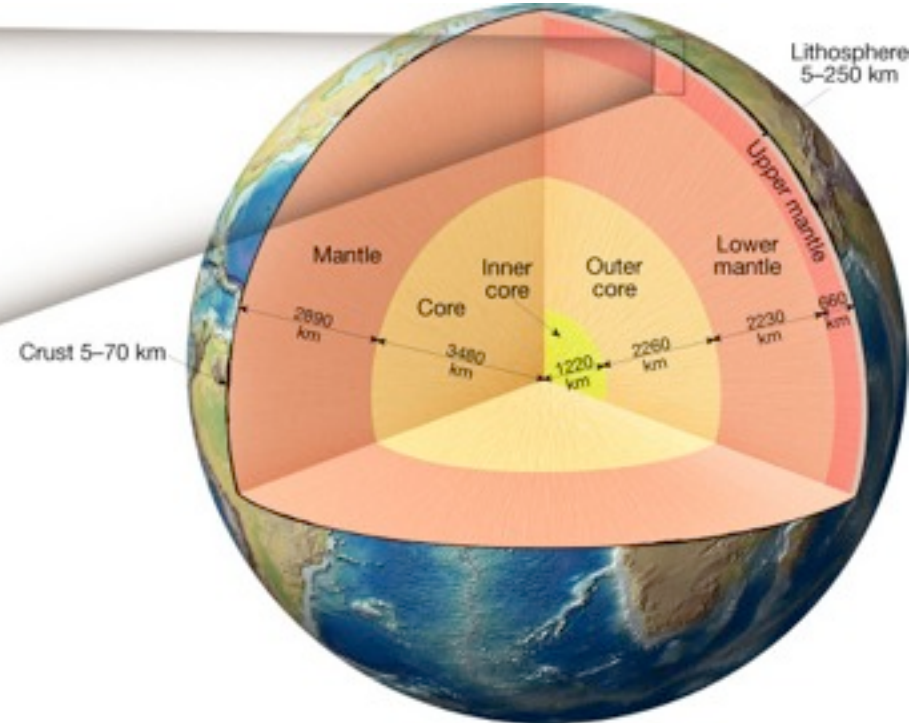
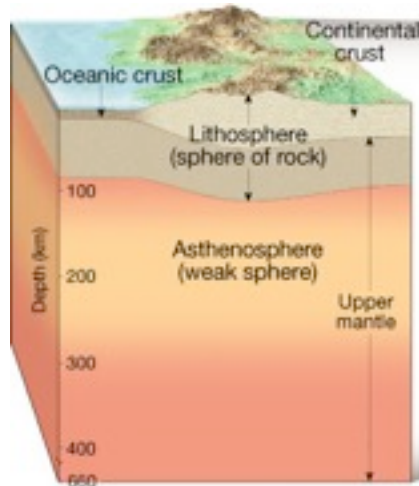
Biosphere Review

What sphere are we dealing with when discussing Plate Tectonics?



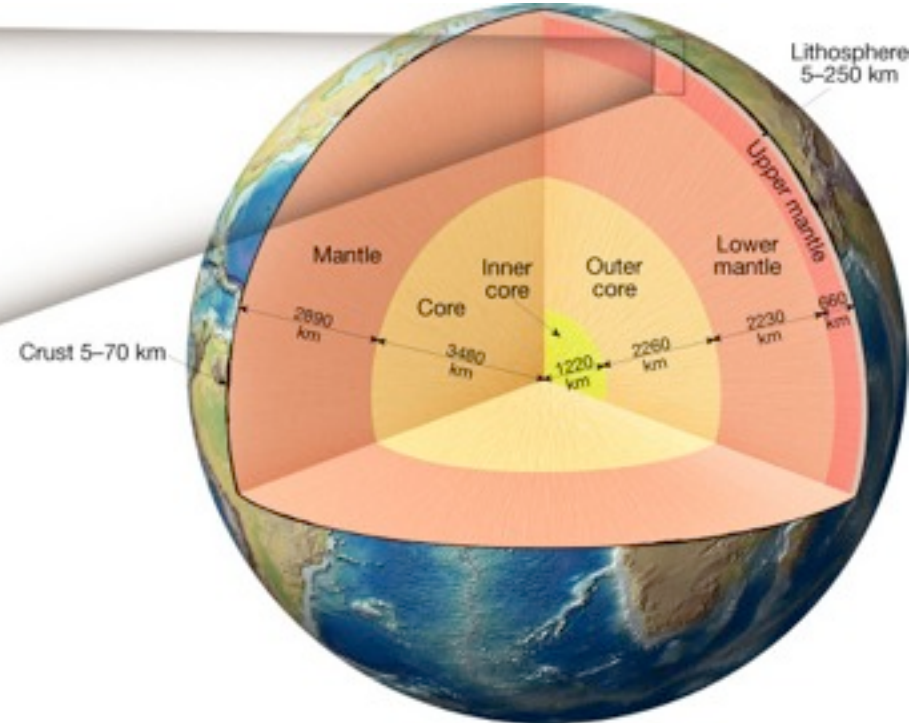
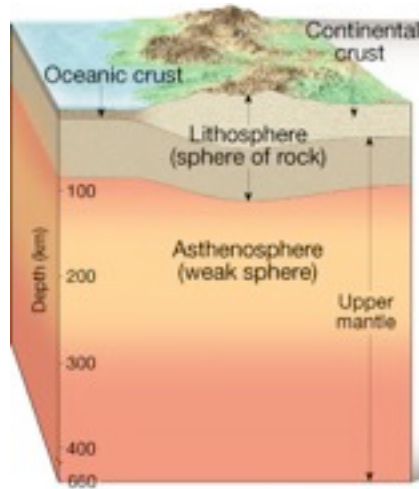
Biosphere Review

What sphere are we dealing with when discussing Plate Tectonics?



Biosphere Review

What sphere are we dealing with when discussing Plate Tectonics?



The Geosphere

Layers of the Earth

- Take five minutes to draw and label the Earth's layers in your notes.
- These are terms we will use all year long, therefore you need to become familiar with them.

Continental Drift

- In 1912 a German scientist named Alfred Wegener proposed a hypothesis called Continental Drift.
- He hypothesized that the continents once formed a single landmass.
- He called it Pangaea, meaning “all land”

Continental Drift



PERMIAN
225 million years ago



TRIASSIC
200 million years ago



JURASSIC
135 million years ago

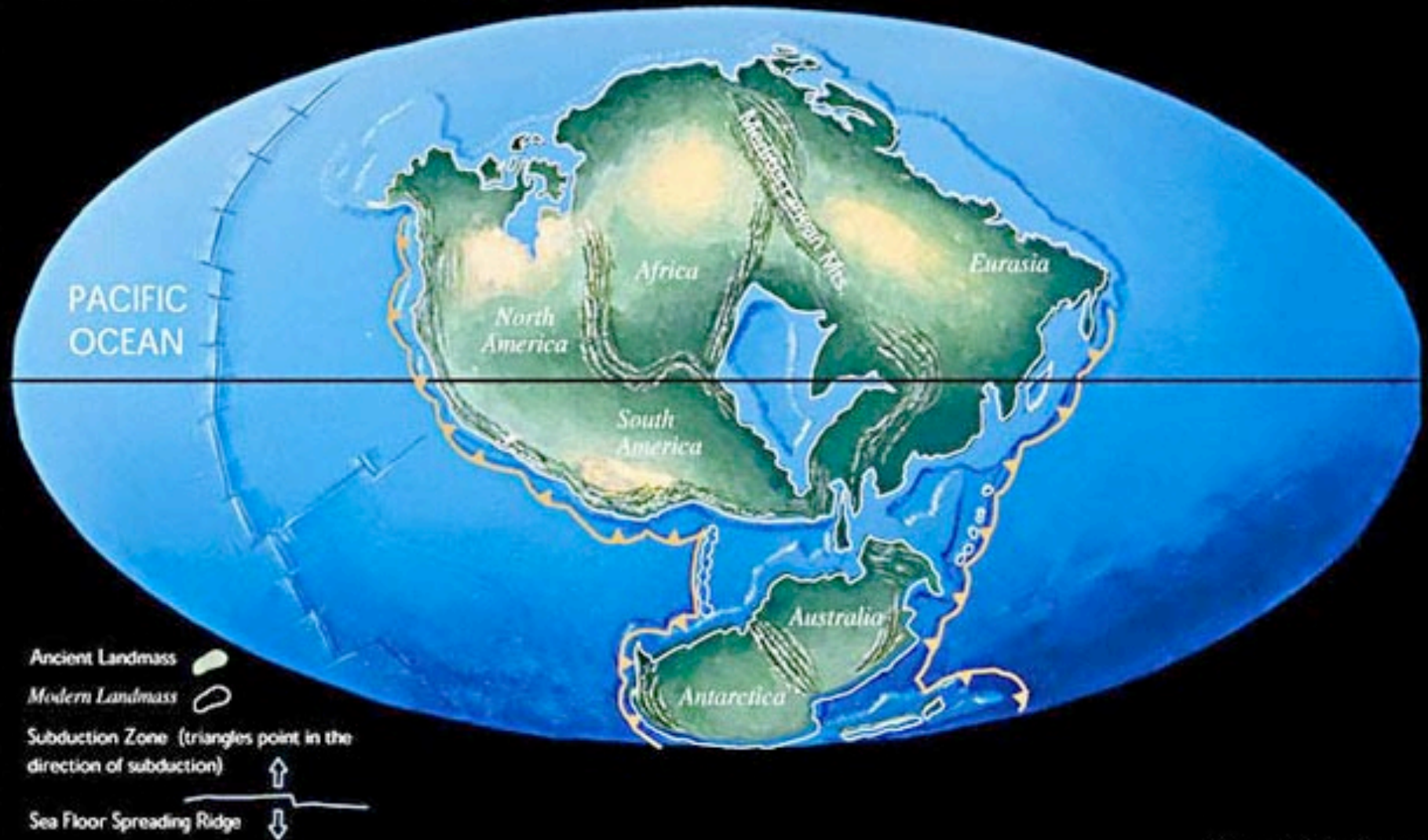


CRETACEOUS
65 million years ago



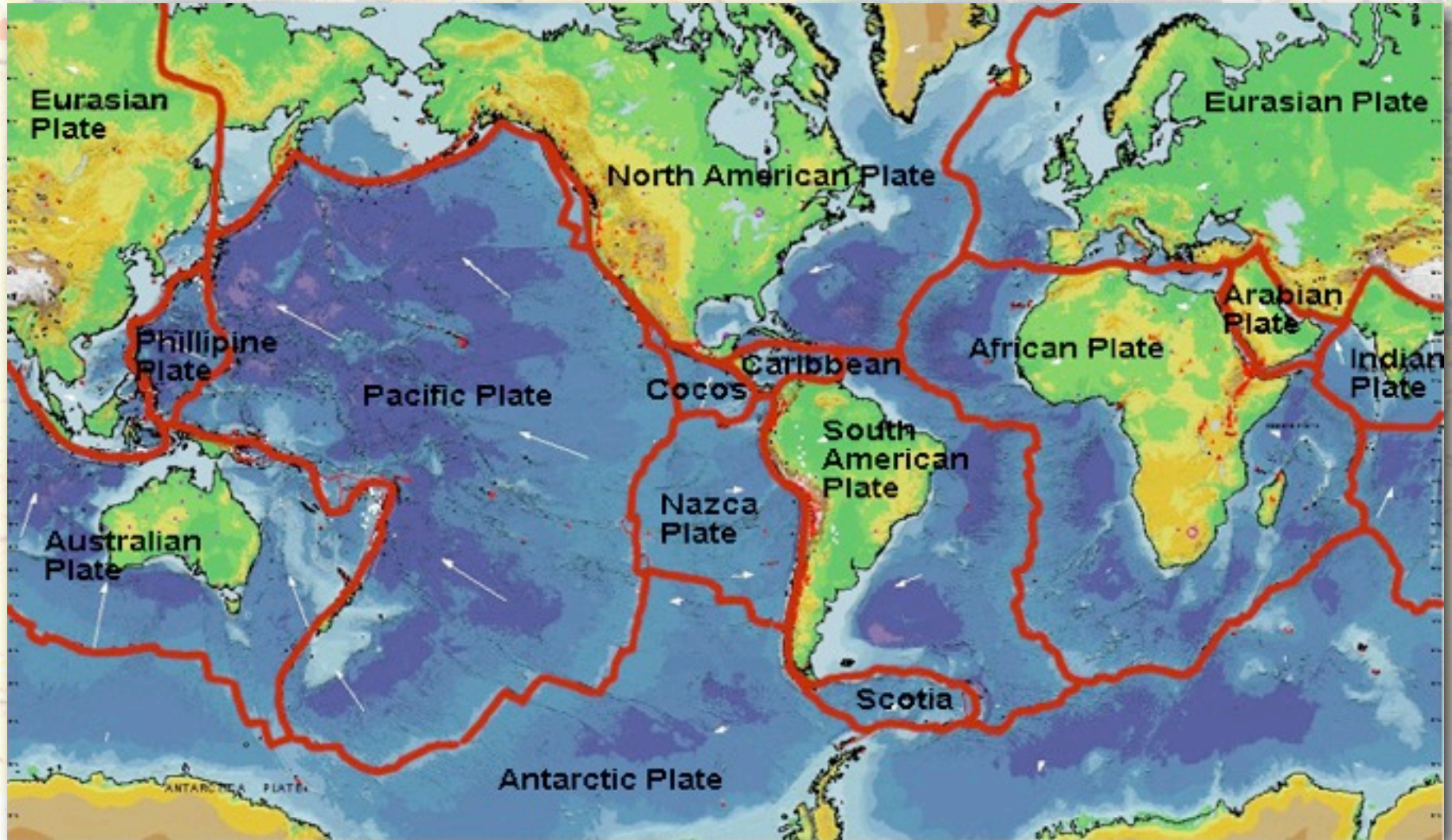
PRESENT DAY

Future World + 250 Ma



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Evidence of Continental Drift



Evidence of Continental Drift

A. Continental Puzzle:

- The shorelines of continents look as though they could fit together like a puzzle.

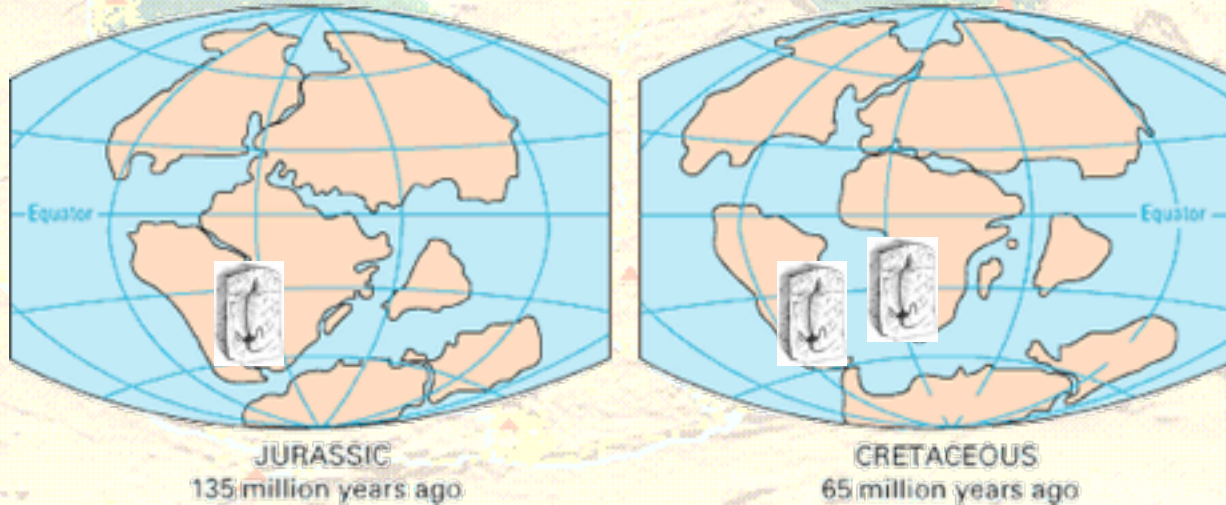


PERMIAN
225 million years ago

Evidence of Continental Drift

B. Fossil Evidence:

- Matching fossils of the same plants and animals were found on shorelines. (They couldn't swim across the ocean.)



Evidence of Continental Drift

C. Geologic Evidence:

- The age and type of rocks in coastal regions that are far apart from each other matched closely.
- Mountain chains appear to continue on landmasses across the ocean.

Evidence of Continental Drift

D. Climatic (climate) evidence:

- Debris from glaciers found in areas that are now hot. (Too hot to have glaciers).
- Plant fossils found in areas where it is too cold for plants to grow.
- Continents must have _____ to their present locations

Activity

- Create a propaganda poster in Pages with one of the newsletter templates justifying the Continental Drift Theory.
- Include the four pieces of evidence for continental drift.
- Use photos to illustrate each piece of evidence in the poster.
- This needs to be attractive and make me a believer of the Continental Drift Theory.
- ***Due 10 minutes before the end of the period.***